## CLAIMS

1. **(Currently Amended)** An ion-assisted electron beam evaporation process, the process comprising the steps of:

positioning multiple high yield fixtures in an array;

adjusting a vertical position of each of the fixtures to compensate for variations in deposition rate versus chamber location;

providing two electron guns;

mounting the guns to a movable track;

~~positioning~~ moving the first gun [[at]] to a source deposition location;

rotating the fixtures at greater than 2400 rpm;

performing ion assisted evaporation with the first gun, the second gun being kept in a first stand-by location in pre-heat mode;

ceasing deposition prior to achieving target thickness on each fixture by shuttering each of the fixtures;

independently reopening the fixtures to resume deposition at a low rate pulsed deposition to achieve the target thickness;

closing shutters on the fixtures;

moving the first gun to a second stand-by ~~position~~ location;

moving the second gun to the source deposition location;

sampling evaporation with a quartz crystal thickness monitor;

opening a shutter on the second gun;

performing ion assisted evaporation with the second gun, the first gun being kept in [[a]] the second stand-by location in pre-heat mode;

ceasing deposition prior to achieving target thickness shuttering each of the fixtures;

independently reopening the fixtures to resume deposition at a low rate pulsed deposition to achieve the target thickness;

closing shutters on the fixtures; and

repeating the process until desired filter is obtained.

**2.** **(Currently Amended)** A method for producing an optical filter utilizing line-of-sight deposition, the method comprising the steps of:

providing multiple substrates;

providing a fixed ion source;

providing at least one selectively movable evaporator, the evaporator providing energy for evaporation of material to be deposited and being ~~positionable at~~ moveable between a source deposition location and [[at]] a stand-by location spaced apart from the source deposition location;

~~positioning~~ moving the at least one evaporator [[at]] to the source deposition location; and,

depositing material onto the substrates.

**3.** **(Original)** The method of Claim 2, wherein the method further comprises the step of:

shuttering the substrates as necessary to ensure uniform deposition on the substrates.

**4. (Original)** The method of Claim 3, where in the method further comprises the step of:

rotating the substrates at approximately greater than 500 revolutions per minute.

**5. (Previously Presented)** The method of Claim 4, wherein shuttering the substrates as necessary to ensure uniform deposition on the substrates comprises the steps of:

ceasing deposition of a layer prior to achieving target thickness by shuttering the substrates;

independently unshuttering the substrates to resume deposition; and,

achieving the target thickness.

**6. (Currently Amended)** The method of Claim 2, wherein the at least one evaporator is at least two selectively movable evaporators, the method further comprising the steps of:

moving the first evaporator to the stand-by ~~position~~ location;

opening a shutter on the second evaporator;

~~positioning~~ moving the second evaporator [[at]] to the source deposition location; and,

performing ion assisted evaporation with the second evaporator.

**7. (Previously Presented)** The method of Claim 6, wherein the method further comprises the steps of:

ceasing deposition of a layer prior to achieving target thickness by shuttering the substrates;

independently unshuttering the substrates to resume deposition; and,

achieving the target thickness.

**8.** **(Original)** The method of Claim 7, wherein after moving the second evaporator into the source deposition location, the method comprises the step of:

sampling evaporation with a quartz crystal thickness monitor.

**9.** **(Original)** The method of Claim 8, wherein the method further comprises the steps of:

closing clam shutters on the substrates; and,

repeating the process until desired filter is obtained.

**10.** **(Original)** The method of Claim 9, wherein providing multiple substrates comprises the step of:

providing a dense high yield fixture array having multiple, independently shutterable fixtures, each of the fixtures containing multiple substrates.

**11-19. (Canceled)**

**20.** **(Original)** The method of Claim 4, wherein rotating the substrates at greater than 500 revolutions per minute comprises the step of:

rotating the substrates at greater than 2400 revolutions per minute.

**21-22. (Canceled)**

**23.** **(Currently Amended)** A method of making an optical filter by ion assisted deposition comprising the steps of:

mounting one or more substrates in a deposition chamber;

mounting an ion source within the chamber;

~~positioning~~ moving a first evaporator [[at]] to a source deposition ~~position~~ location ~~located~~ within the chamber proximate the ion source, the first evaporator being adapted to provide energy for evaporation of a first material to be deposited;

~~positioning~~ moving a second evaporator [[at]] to a stand-by ~~position~~ location ~~located~~ within the chamber remote from the ion source, the second evaporator being adapted to provide energy for evaporation of a second material to be deposited;

depositing a first material from the first evaporator on the one or more substrates;

ceasing deposition of the first material;

~~positioning~~ moving the first evaporator [[at]] to a stand-by ~~position~~ location within the chamber remote from the ion source;

~~positioning~~ moving the second evaporator [[at]] to the source deposition ~~position~~ location;

depositing a second material from the second evaporator on the one or more substrates; and

ceasing deposition of the second material.

**24.** **(Currently Amended)** A method of making an optical filter by ion assisted deposition comprising the steps of:

exposing one or more substrates to a first evaporator adapted to provide energy to evaporate a first material to be deposited positioned at a source deposition location;

shielding the one or more substrates from a second evaporator positioned at a stand-by location laterally spaced from the source deposition location;

depositing a layer of a first material on the one or more substrates;

exposing the one or more substrates to the second evaporator adapted to provide energy to evaporate a second material to be deposited positioned at the source deposition location;

shielding the one or more substrates from the first evaporator positioned at the stand-by location; and

depositing a layer of second material on the one or more substrates.

**25. (Currently Amended)** A method comprising the steps of:

providing a deposition chamber;

positioning a generally planar substrate carrier proximate one end of the chamber, the substrate carrier being adapted to carry an array of substrates;

positioning a generally planar electron gun carrier proximate the other end of the chamber, the electron gun carrier being substantially parallel to the substrate carrier;

providing a source deposition location on the electron gun carrier;

providing a stand-by location on the electron gun carrier, the stand-by location being spaced laterally from the source deposition location;

positioning an electron gun on the electron gun carrier, the electron gun being adapted to provide energy for evaporation of material to be deposited on the substrates and being ~~positionable at~~ moveable between the source deposition location and the stand-by location; and

positioning an ion source proximate the source deposition location.

**26. (Previously Presented)** The method of Claim 25 wherein the ion source is mounted on the electron gun carrier.

**27. (Currently Amended)** The method of Claim 25 further comprising the step of positioning a second electron gun on the electron gun carrier, the second electron gun being adapted to provide energy for evaporation of a second material to be deposited on the substrates and being ~~positionable at~~ moveable between the source deposition location and the stand-by location.

**28. (Previously Presented)** The method of Claim 1 wherein the stand-by location is laterally spaced from the ion source a distance greater than the distance the source deposition location is spaced from the ion source.